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| APPLICATION NO.                         | FILING DATE                  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------------------------------|----------------------|---------------------|------------------|
| 10/550,956                              | 09/28/2005                   | Kyotaro Abe          | 125496              | 6087             |
|   | 7590 08/21/2007<br>RIDGE PLC | EXAMINER             |                     |                  |
| OLIFF & BERRIDGE, PLC<br>P.O. BOX 19928 |                              |                      | HA, NGUYEN T        |                  |
| ALEXANDRIA, VA 22320                    |                              |                      | ART UNIT            | PAPER NUMBER     |
|   |                              |                      | 2831                |                  |
|   |                              |                      |                     |                  |
|   |                              |                      | MAIL DATE           | DELIVERY MODE    |
|   |                              |                      | 08/21/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| · • •  | ·   | Application No.   | Applicant(s)  |  |  |
|--|---|---|---|--|--|
|  |   | 10/550,956  | ABÉ ET AL.  |  |  |
| Office Action Summary                                |   | Examiner  | Art Unit  |  |  |
|  |   | Nguyen T. Ha  | 2831  |  |  |
| Period fo  | The MAILING DATE of this communication app  | ears on the cover sheet w   | rith the correspondence address   |  |  |
|  | ORTENED STATUTORY PERIOD FOR REPLY  | / IS SET TO EXPIRE 3 N  | MONTH(S) OR THIRTY (30) DAYS  |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | CHEVER IS LONGER, FROM THE MAILING DATES of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNI 36(a). In no event, however, may a vill apply and will expire SIX (6) MOI cause the application to become A | ICATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |  |  |
| Status   | • ,   |   |   |  |  |
| 1)⊠  | Responsive to communication(s) filed on 28 Se   | eptember 2005.  |   |  |  |
| 2a) <u></u> ☐  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |   |   |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |  |  |
|  | closed in accordance with the practice under E  | x parte Quayle, 1935 C.[  | D. 11, 453 O.G. 213.  |  |  |
| Dispositi  | ion of Claims   |   |   |  |  |
| 4)⊠  | Claim(s) <u>1-8</u> is/are pending in the application.  |   |   |  |  |
|  | 4a) Of the above claim(s) is/are withdraw   | vn from consideration.  |   |  |  |
| 5)   | Claim(s) is/are allowed.  |   | ,   |  |  |
|  | Claim(s) <u>1-8</u> is/are rejected.  |   |   |  |  |
|  | Claim(s) is/are objected to.  |   |   |  |  |
| . 8)∐  | Claim(s) are subject to restriction and/or  | r election requirement.   |   |  |  |
| Applicati  | ion Papers  |   |   |  |  |
| 9)[  | The specification is objected to by the Examine   | r.  |   |  |  |
| 10)  | The drawing(s) filed on is/are: a) acce   | epted or b)□ objected to  | by the Examiner.  |  |  |
|  | Applicant may not request that any objection to the   | drawing(s) be held in abeya   | nce. See 37 CFR 1.85(a).  |  |  |
|  | Replacement drawing sheet(s) including the correct  | · · · · · · · · · · · · · · · · · · ·   |   |  |  |
| 11)  | The oath or declaration is objected to by the Ex  | aminer. Note the attache  | d Office Action or form PTO-152.  |  |  |
| Priority u   | under 35 U.S.C. § 119   |   |   |  |  |
| 12)🛛   | Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C.  | § 119(a)-(d) or (f).  |  |  |
| _  | ☑ All b)☐ Some * c)☐ None of:   |   |   |  |  |
|  | 1. Certified copies of the priority documents   | s have been received.   |   |  |  |
|  | 2. Certified copies of the priority documents   | s have been received in A   | Application No  |  |  |
|  | 3. Copies of the certified copies of the prior  | ity documents have beer   | received in this National Stage   |  |  |
|  | application from the International Bureau   | ,   |   |  |  |
| * 8  | See the attached detailed Office action for a list  | of the certified copies not   | received.   |  |  |
| •  | ·   |   |   |  |  |
| A440.0b  |   |   |   |  |  |
| Attachmen  1) Notice                                 | t(s)<br>e of References Cited (PTO-892)   | ,<br>4)   | Summary (PTO-413)   |  |  |
| 2) Notic   | e of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(   | s)/Mail Date  |  |  |
|  | mation Disclosure Statement(s) (PTO/SB/08)<br>r No(s)/Mail Date <u>0905 &amp; 1106</u> .  | 5)  Notice of I   | Informal Patent Application   |  |  |

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1-8 are rejected under 35 U.S.C. 102(a) as being anticipated by the Japanese Patent 2001-106580 (580).

Regarding claim 1, the Japanese Patent (580) disclose a green sheet coating material, comprising ceramic powder and a binder resin containing a bytyral based resin as the main component, and furthermore comprising a xylene based resin as a tackifier (see the international search report).

Regarding claim 2, the Japanese Patent (580) discloses the xylene based resin is contained in a range of 1.0 wt% or less with respect to 100 parts by weight of the ceramic powder.

Regarding claim 3, the Japanese Patent (580) disclose the butyral based resin is a polybytyral resin, and a polymerization degree of the polybutyral resin is 1000 or higher and 1700 or lower, a butyralation degree of the resin is higher than 64% and lower than 78%, and a residual acetyl group amount is less than 6%.

Regarding claim 4, the Japanese Patent (580) disclose the binder resin is contained by 5 parts by weight or more and 6.5 parts by weight or less with respect to 100 parts by weight of the ceramic powder.

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Regarding claim 5, the Japanese Patent (580) disclose the green sheet containing dioctyl phthalate as a plasticizer by 40 parts by weight or more and 70 parts by weight or less with respect to 100 parts by weight of the binder resin.

Regarding claim 6, the Japanese Patent (580) disclose a production method of a ceramic green sheet, comprising the steps of:

- preparing a green sheet coating material as set forth in claim 1,
- forming a ceramic green sheet by using the green sheet coating material (see the international search report).

Regarding claim 7, the Japanese Patent (580) disclose a producing method of ceramic electronic device, comprising the steps of:

- forming a ceramic green sheet by using the green sheet coating material;
- drying the green sheet;
- stacking dried green sheets via internal electrode layers to obtain a green chip, and firing the green chip.

Regarding claim 8, the Japanese Patent (580) disclose a green sheet produced by using a green sheet coating material as set forth in claim 1.

## Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 12-14, and 16 of copending Application No. 10/550,957. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the claimed limitation of the present application are recited in the claims of copending application 10/550,957 and therefore the claims 1-2, 12-14, and 16 of the copending application 10/550,957 anticipate the claims 1-8 of the present application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Citation Relevant of Prior Art

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Endo et al. (US 6,749,768) disclose magnetic ferrite powder, magnetic ferrite sinter, layered ferrite part.
  - b. Suzuki et al. (US 5,683,790) disclose multilayer ceramic parts.

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c. Nakatani et al. (US 5,004,640) disclose multilayered ceramic substrates and method for manufacturing.

## Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 16, 2007

RRIMARY EXAMINER